

Application/Control Number: 09/770,890  
Art Unit: 2665

Docket No.:113351

**REMARKS**

Reconsideration and allowance are requested. Claims 32 - 48 and 53 - 56 are pending. Claims 35 and 55 are amended. Claims 32 - 48 and 53 - 56 have been elected.

**Rejection of Claims 35 and 55 Under Section 112**

Applicants have amended these claims to address the antecedent basis issue identified by the Examiner. Applicants request withdrawal of this rejection.

**Rejection of Claims 32 - 35 and 38 - 42 Under Section 102(b)**

The Examiner rejects claims 32 - 35 and 38 - 42 Under Section 102(b) as being anticipated by Gilhousen. Applicants traverse this rejection and submit that Gilhousen fails to teach each limitation of the claims.

We first turn to claim 32. This claim recites steps including spreading a transmission signal by a PN-code assigned to an intended receiving port, thereafter inserting an identifier of a few bits for identifying a user, spreading payload data by an orthogonal code and spreading the orthogonal spread payload data signal by the PN-code identifying the user with payload data. Gilhousen performs these steps in a different order. For example, the Examiner equates the step of spreading the transmission signal with the PN-code assigned to an intended receiving port with FIG. 11, Refs 614 and 616. However, these steps in Gilhousen occur after the application in Gilhousen of the mobile unit address PN-code generator 608. Furthermore, Gilhousen does not teach that the PN generators generate codes that are assigned to an intended receiving port. In contrast, Gilhousen teaches that generators 614 and 616 generate PN sequences that are the same for all mobile units. They are the zero-shift type used in call-to-mobile communications. Simply put, Gilhousen does not teach that the PN-codes generated by generators 614 and 616 are assigned to an intended receiving port as is recited in claim 32.

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Further reasons exist for the patentability of claim 32. For example, as mentioned above, the order of the signal processing is different in Gilhousen. Claim 32 recites inserting an identifier of a few bits for identifying a user after spreading the transmission signal. This order is opposite to that in Gilhousen. Similarly, in claim 32, the step of spreading payload data by an orthogonal code is in a different order from Gilhousen.

Accordingly, since Gilhousen fails to teach the same PN-code application as is recited in claim 32 and because the order differs from the present invention, Applicants submit that claim 32 is patentable and in condition for allowance.

Claims 33 - 35 each depend from claim 32 and recite further limitations therefrom. Accordingly, Applicants submit that these claims are patentable as well.

Claim 38 is patentable for the same reasons set forth above and its dependent claims 39 - 42 are patentable as well.

#### **Rejection of Claims 37, 43 - 47 and 53 - 56 Under Section 103**

The Examiner rejects claims 37 and 43 - 47 under section 103 in view of Focarile, McTiffin and Natali. Applicants traverse this rejection and submit that there is insufficient motivation to combine these references.

To establish a *prima facie* case of obviousness, the Examiner must meet three criteria. First, there must be some motivation or suggestion, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to combine the references. Second, there must be a reasonable expectation of success, and finally, the prior art references must teach or suggest all the claim limitations. The Examiner bears the initial burden of providing some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found

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the claimed invention to have been obvious in light of the teachings of the references." MPEP 2142.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Furthermore, if the examiner determines there is factual support for rejecting the claimed invention under 35 U.S.C. 103, the examiner must then consider any evidence supporting the patentability of the claimed invention, such as any evidence in the specification or any other evidence submitted by the applicant. The ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it. With regard to rejections under 35 U.S.C. 103, the examiner must provide evidence which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a *prima facie* case of obviousness) is more probable than not. MPEP 2142.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in analogous arts. Where the teachings of two or more prior art references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991). MPEP 2143.01.

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With the above principles in mind, we turn to the references to analyze their suggestive power for combination. We note again that the standard of proof is only by a preponderance of the evidence. Now, Focarile teaches a system and method for delivering packetized data representing radio signals to and from cell sites. Abstract. The inventor recognized in the introduction that one of the problems in communications with cell sites is that there is no system that could directly transport cellular radio data to their destination, whether the destination is the PSTN or another cellular system, without adding additional hardware to the switch or adding multiple levels of translation of the data. Col. 3, lines 37 - 45. Accordingly, a primary problem identified by Focarile is that the additional multiple layers of data translation is a problem.

Now, in contrast, McTiffin teaches a system and method for transmission of data from an ATM network to a mobile radio system. As part of the McTiffin system (and one needs to look no further than the Abstract), he introduces multiple translation systems. For example, in the Abstract he teaches a translation responsive to VPI and VCI data and a second translator responsive to codes corresponding to user addresses. Applicants respectfully submit that by a preponderance of the evidence, one of skill in the art would not find motivation or a suggestion to combine the Focarile reference which identifies the problem as adding multiple levels of data translation in communications systems with McTiffin, whose approach is to add multiple translation systems into a communications system. These two references are clear teaching the opposite and incompatible approaches to improving mobile communications.

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Therefore, since these references teach away from each other, by a preponderance of the evidence, one of skill in the art would not have motivation or find suggestions to combine McTiffin with Focarile. Therefore, claims 37 and 43 - 47 are patentable and in condition for allowance.

Inasmuch as these two references cannot be combined because of their opposite approaches, Applicants submit also that claims 53 - 56 are patentable and in condition for allowance.

#### **Rejection of Claim 48 Under Section 103**

Claim 48 is rejected as being obvious in view of McTiffin and Natali. The Examiner asserts that the motivation to combine these two references would be to improve throughput. Applicants submit that there is insufficient motivation or suggestion to combine these references. Natali focuses on a power efficient paging invention for mobile users. The invention relates to a relatively simply method of paging which involves assigning a unique digital address to mobile stations with each unique address being mapped into an orthogonal signal. They describe the result as a "simple signal detection problem with a single threshold on the correlator output." Col. 2, lines 31 - 35.

In contrast, McTiffin presents a fairly complex approach to translation ATM signals to a mobile device. These are not paging signals but signals within an ATM network with multiple fields. Col. 1, lines 20 - 30. Applicants submit that one of skill in the art would not be motivated to combine McTiffin's ATM to mobile device translation system with the simple paging features of Natali. The focus and purpose of these two references simply do not lend themselves to containing motivation or suggestive influence to combine.

Furthermore, the Examiner asserts that the motivation to combine these references would be to improve the throughput of the system. However, the objective of Natali is to provide a power-efficient paging system for a mobile device. Throughput is not the identified benefit of the orthogonal code to address feature in Natali. Therefore, Applicants

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respectfully submit that one of skill in the art would not necessarily see the features taught in Natali as beneficial for the purpose of improving throughput (especially where the title of Natali makes it clear that it discloses "Power Efficient Paging....".

Accordingly, Applicants submit that by a preponderance of the evidence, one of skill in the art would not find motivation or suggestion to combine these two references and therefore, claim 48 is patentable.

### CONCLUSION

Having addressed the rejection of claims, Applicants respectfully submit that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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